POWER AMPLIFICATION BY USING DIFFERENT FIXED POWER SUPPLY SIGNALS FOR THE AMPLIFIER

ABSTRACT

The present invention proposes a power amplification under variable envelope excitation, wherein an original input signal at least is converted into a phase modulated signal part, at least the phase modulated signal part is fed to an input port of an amplifier unit, the input signal is amplified by dynamically selecting a fixed power supply (PSU 1, PSU 2, PSU 3) for the amplifier unit, and wherein the amplitude content of the original input signal is reconstructed by changing dependent on the respective provided power supply a further controllable input of the amplifier unit, in particular the input power level (P_{in}) and/or the biasing voltage (U_g) and/or biasing current at the control input of the amplifier unit, during said step of amplifying.